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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/675,518	09/29/2000	Joel A. Drewes	030641.0017.CON1	1569

7590 10/21/2002  
Michael A Whittaker  
Foley & Lardner  
402 W. Broadway  
23 Floor  
San Diego, CA 92101

EXAMINER

FORMAN, BETTY J

ART UNIT	PAPER NUMBER
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1634

DATE MAILED: 10/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/675,518	<b>Applicant(s)</b> DREWES ET AL.	
	<b>Examiner</b> BJ Forman	<b>Art Unit</b> 1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 51-91 is/are pending in the application.
- 4a) Of the above claim(s) 83-91 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 51-82 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \*   c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

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**DETAILED ACTION**

1. This action is in response to papers filed 24 July 2002 in Paper No. 10 in which claims 51, 53, 54, 57, 67, 69, 70 and 73 were amended and the specification was amended to insert a first paragraph cross-referencing parent applications. All of the amendments have been thoroughly reviewed and entered. The previous rejections in the Office Action of Paper No. 8 dated 10 April 2002 are withdrawn in view of the amendments and new grounds for rejection. All of the arguments have been thoroughly reviewed but are deemed moot in view of the amendments, withdrawn rejections and/or new grounds for rejection. New grounds for rejection are discussed.

Currently claims 51-81 are under prosecution.

***Priority***

2. Applicant's amendment to the specification inserting a first paragraph cross-referencing parent applications complies with the conditions for receiving the benefit of the earlier filing date under 35 U.S.C. 120.

3. Applicant's claim for domestic priority under 35 U.S.C. 120 is acknowledged. However, the parent application 08/742,255 filed 31 October 1996 does not provide adequate support under 35 U.S.C. 112 for claims 53, 58-62, 64, 65, 68, 69, 74-78, 80 and 81 of this application. Specifically, the '255 application does not provide support for the instantly claimed "varying the  $sp^2$  and  $sp^3$  character of the diamond-like carbon" recited in claims 53 & 69; the diamond-like compounds recited in claims 58-60 & 74-76; the support material that is not compatible with

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high temperatures as recited in claims 61, 62, 77 & 78; the capture molecules recited in claim 68; and the hardness of the diamond-like carbon recited in claims 64, 65, 80 and 81.

Because the '255 application does not teach the above limitations, the '255 application does not provide adequate support under 35 U.S.C. 112 for instant claims 53, 58-62, 64, 65, 68, 69, 74-78, 80 and 81. Therefore, the effective filing date for instant claims 53, 58-62, 64, 65, 68, 69, 74-78, 80 and 81 is the filing date of parent application 08/950,963 i.e. 15 October 1997.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 63 and 79 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 63 and 79 are each indefinite for the recitation "PETE" because it is an abbreviation the meaning of which may change over time. It is suggested that the claims be amended to recite the complete term.

***Claim Rejections - 35 USC § 102***

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6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 51, 52, 55-60, 66-68, 71-76 and 82 are rejected under 35 U.S.C. 102(e) as being anticipated by Kobashi (U.S. Patent No. 5,777,372, filed 1 March 1996).

Regarding Claim 51, Kobashi discloses a support comprising a surface on which an assay for an analyte of interest can be preformed comprising: an attachment layer comprising diamond-like carbon on the support surface and wherein the attachment layer is adapted for capture of the analyte of interest for detecting in the assay by binding the analyte directly to the diamond-like carbon (Column 10, line 26-Column 12, line 33; Column 15, lines 58-64; Fig. 21-23; and Claim 11).

Regarding Claim 52, Kobashi discloses the support wherein the attachment layer comprises a layer of diamond-like carbon of between about 50 Å to about 3000 Å (Column 7, lines 10-22).

Regarding Claim 55, Kobashi discloses the support wherein the support further comprises an optically functional layer between the support and the attachment layer (Column 10, lines 8-49).

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Regarding Claim 56, Kobashi discloses the support wherein the support provides a change in optical thickness upon binding the analyte (Column 10, lines 8-49).

Regarding Claim 57, Kobashi discloses the support wherein the support is configured to provide laminar flow across the support (Fig. 7-15).

Regarding Claim 58, Kobashi discloses the support wherein the attachment layer comprises diamond-like carbon selected from the group consisting of synthetic diamond, natural diamond, and polycrystalline diamond (Column 15, lines 58-64).

Regarding Claim 59, Kobashi discloses the support wherein the diamond-like carbon comprises non-carbon material (Column, 10, line 63-Column 11, line 11).

Regarding Claim 60, Kobashi discloses the support wherein the non-carbon material is hydrogen (Column, 10, line 63-Column 11, line 11).

Regarding Claim 66, Kobashi discloses the support wherein the support is a biosensor (Abstract and Claim 1).

Regarding Claim 67, Kobashi discloses a support comprising a surface on which an assay for an analyte of interest can be preformed comprising: an attachment layer comprising diamond-like carbon on the support surface wherein the attachment layer comprises a layer of diamond-like carbon of between about 50 Å to about 3000 Å (Column 7, lines 10-22) and wherein the attachment layer a capture molecule bound to the diamond-like carbon for specific capture of an analyte by binding the analyte to said capture molecule (Column 10, line 26-Column 12, line 33; Column 15, lines 58-64; Fig. 21-23; and Claim 11).

Regarding Claim 68, Kobashi discloses the support wherein the capture molecule is an enzyme (Column 11, lines 12-22 and Table 1).

Regarding Claim 71, Kobashi discloses the support wherein the support further comprises an optically functional layer between the support and the attachment layer (Column 10, lines 8-49).

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Regarding Claim 72, Kobashi discloses the support wherein the support provides a change in optical thickness upon binding the analyte (Column 10, lines 8-49).

Regarding Claim 73, Kobashi discloses the support wherein the support is configured to provide laminar flow across the support (Fig. 7-15).

Regarding Claim 74, Kobashi discloses the support wherein the attachment layer comprises diamond-like carbon selected from the group consisting of synthetic diamond, natural diamond, and polycrystalline diamond (Column 15, lines 58-64).

Regarding Claim 75, Kobashi discloses the support wherein the diamond-like carbon comprises non-carbon material (Column, 10, line 63-Column 11, line 11).

Regarding Claim 76, Kobashi discloses the support wherein the non-carbon material is hydrogen (Column, 10, line 63-Column 11, line 11).

Regarding Claim 82, Kobashi discloses the support wherein the non-carbon material is hydrogen (Column, 10, line 63-Column 11, line 11).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 53, 54, 69 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobashi (U.S. Patent No. 5,777,372, filed 1 March 1998) in view of Yu (U.S. Patent No. 5,273,788, issued 28 December 1993).

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Regarding Claim 53, Kobashi teaches a support comprising a surface on which an assay for an analyte of interest can be preformed comprising: an attachment layer comprising diamond-like carbon on the support surface and wherein the attachment layer is adapted for capture of the analyte of interest for detecting in the assay by binding the analyte directly to the diamond-like carbon (Column 10, line 26-Column 12, line 33; Column 15, lines 58-64; Fig. 21-23; and Claim 11) wherein hydrophobicity is controlled to optimize functionality (Column 5, lines 29-31) but they are silent regarding the control of hydrophobicity results from varying the  $sp^2$  and  $sp^3$  character of the diamond-like carbon. However, Yu teach variations in  $sp^2$  and  $sp^3$  characteristics which determine the hydrophobicity the diamond-like carbon films was well known in the art at the time the claimed invention was made as taught by Yu. Specifically, Yu teaches that the diamond-like film characteristics e.g. hydrophobicity are controlled by altering the  $sp^2$  and  $sp^3$  ratio as desired during formation of the film (Column 3, lines 15-35 and Column 3, line 54-Column 4, line 16). It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to apply the controlled film formation taught by Yu to thereby vary the hydrophobicity of the diamond-like carbon attachment layer of the support of Kobashi based on their suggestion to vary the hydrophobicity of the attachment layer to optimize attachment of the capture molecule for the obvious benefits of optimizing functionality of the support as taught by Kobashi (5, lines 29-31).

Regarding Claim 54, Kobashi teaches the support comprising diamond-like carbon is illuminated for analysis of analyte binding (Column 17, lines 27-33) but they are silent regarding its function as an antireflective layer. However, it was known in the art at the time the claimed invention was made that diamond-like coatings are antireflective as taught by Yu (Column 1, lines 27-34). Therefore, the diamond-like coating of Kobashi is antireflective.

Regarding Claim 69, Kobashi teaches the support comprising a surface on which an assay for an analyte of interest can be preformed comprising: an attachment layer comprising diamond-like carbon on the support surface wherein the attachment layer comprises a layer of



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diamond-like carbon of between about 50 Å to about 3000 Å (Column 7, lines 10-22) and wherein the attachment layer a capture molecule bound to the diamond-like carbon for specific capture of an analyte by binding the analyte to said capture molecule (Column 10, line 26-Column 12, line 33; Column 15, lines 58-64; Fig. 21-23; and Claim 11) wherein hydrophobicity is controlled to optimize functionality (Column 5, lines 29-31) but they are silent regarding the control of hydrophobicity results from varying the  $sp^2$  and  $sp^3$  character of the diamond-like carbon. However, Yu teach variations in  $sp^2$  and  $sp^3$  characteristics which determine the hydrophobicity the diamond-like carbon films was well known in the art at the time the claimed invention was made as taught by Yu. Specifically, Yu teaches that the diamond-like film characteristics e.g. hydrophobicity are controlled by altering the  $sp^2$  and  $sp^3$  ratio as desired during formation of the film (Column 3, lines 15-35 and Column 3, line 54-Column 4, line 16). It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to apply the controlled film formation taught by Yu to thereby vary the hydrophobicity of the diamond-like carbon attachment later of the support of Kobashi based on their suggestion to vary the hydrophobicity of the attachment layer to optimize attachment of the capture molecule for the obvious benefits of optimizing functionality of the support as taught by Kobashi (5, lines 29-31).

Regarding Claim 70, Kobashi teaches the support comprising diamond-like carbon is illuminated for analysis of analyte binding (Column 17, lines 27-33) but they are silent regarding its function as an antireflective layer. However, it was known in the art at the time the claimed invention was made that diamond-like coatings are antireflective as taught by Yu (Column 1, lines 27-34). Therefore, the diamond-like coating of Kobashi is antireflective.

It is noted that the courts have stated that chemical compositions and its properties are inseparable. Therefore, the properties of the claimed diamond-like carbon are necessarily present in the diamond-like carbon of Kobashi

“Products of identical chemical composition can not have mutually exclusive properties.” A chemical composition and its properties are inseparable. Therefore, if

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the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990) see MPEP § 2112.01.

10. Claims 61-63 and 77-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobashi (U.S. Patent No. 5,777,372, filed 1 March 1996) in view of Turner et al (U.S. Patent No. 5,624,537, filed 20 September 1994).

Regarding Claims 61-63, Kobashi teaches the support comprising a surface on which an assay for an analyte of interest can be preformed comprising: an attachment layer comprising diamond-like carbon on the support surface and wherein the attachment layer is adapted for capture of the analyte of interest for detecting in the assay by binding the analyte directly to the diamond-like carbon (Column 10, line 26-Column 12, line 33; Column 15, lines 58-64; Fig. 21-23; and Claim 11) but they are silent regarding the support further comprising a material that is not compatible with high temperatures (Claim 61) with temperatures greater than 100° C (Claim 62) wherein the material that is not compatible with high temperatures is selected from the group consisting of cellulose, acetate, PETE, polyester, polycarbonate, nylon, filter paper, polysulfones, polypropylene and polyurethane (Claim 63). However, biosensors comprising the claimed cellulose and filter paper were well known in the art at the time the claimed invention was made as taught by Turner et al. Specifically, they teach that the cellulose matrix or filter paper allows for efficient and reliable feedback control for the optimization of reaction conditions (Column 4, lines 46-56 and Column 29, lines 36-49). It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the support surface of Kobashi by adding a cellulose matrix or filter paper

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to the support thereby providing efficient and reliable feedback control for the expected benefit of optimizing reaction conditions as taught by Turner et al (Column 4, lines 46-56 and Column 29, lines 36-49).

Regarding Claims 77-79, Kobashi teaches the support comprising a surface on which an assay for an analyte of interest can be preformed comprising: an attachment layer comprising diamond-like carbon on the support surface wherein the attachment layer comprises a layer of diamond-like carbon of between about 50 Å to about 3000 Å (Column 7, lines 10-22) and wherein the attachment layer a capture molecule bound to the diamond-like carbon for specific capture of an analyte by binding the analyte to said capture molecule (Column 10, line 26-Column 12, line 33; Column 15, lines 58-64; Fig. 21-23; and Claim 11) but they are silent regarding the support further comprising a material that is not compatible with high temperatures (Claim 77) with temperatures greater than 100° C (Claim 78) wherein the material that is not compatible with high temperatures is selected from the group consisting of cellulose, acetate, PETE, polyester, polycarbonate, nylon, filter paper, polysulfones, polypropylene and polyurethane (Claim 79). However, biosensors comprising the claimed cellulose and filter paper were well known in the art at the time the claimed invention was made as taught by Turner et al. Specifically, they teach that the cellulose matrix or filter paper allows for efficient and reliable feedback control for the optimization of reaction conditions (Column 4, lines 46-56 and Column 29, lines 36-49). It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the support surface of Kobashi by adding a cellulose matrix or filter paper to the support thereby providing efficient and reliable feedback control for the expected benefit of optimizing reaction conditions as taught by Turner et al (Column 4, lines 46-56 and Column 29, lines 36-49).

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11. Claims 64, 65, 80 and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobashi (U.S. Patent No. 5,777,372, filed 1 March 1996) in view of Choi et al (U.S. Patent No. 5,883,769, filed 30 June 1997).

Regarding Claim 64, Kobashi teaches the support comprising a surface on which an assay for an analyte of interest can be preformed comprising: an attachment layer comprising diamond-like carbon on the support surface and wherein the attachment layer is adapted for capture of the analyte of interest for detecting in the assay by binding the analyte directly to the diamond-like carbon (Column 10, line 26-Column 12, line 33; Column 15, lines 58-64; Fig. 21-23; and Claim 11) but they are silent regarding the hardness of the diamond-like carbon. However, the properties of diamond-like carbon were well known in the art as taught by Choi et al. Specifically, Choi et al teach the hardness of diamond-like carbon is between about 15 to about 50 Gpa (Table 1, Column 3, lines 47-62). Therefore, the diamond-liked carbon of Kobashi has a hardness of between about 15 to about 50 Gpa as claimed.

Regarding Claim 65, Kobashi teaches the support comprises diamond-like carbon (Abstract and Column 15, lines 58-64) but they are silent regarding the refractive index. However, the properties of diamond-like carbon were well known in the art at the time the claimed invention was made as taught by Choi et al. Specifically, Choi et al teach the refractive index of diamond-like carbon is about 1.5 to about 2.2 (Table 1, Column 3, lines 47-62). Therefore, the diamond-liked carbon of Kobashi has a refractive index of about 1.5 to about 2.2 as claimed.

Regarding Claim 80, Kobashi teaches the support comprising a surface on which an assay for an analyte of interest can be preformed comprising: an attachment layer comprising diamond-like carbon on the support surface wherein the attachment layer comprises a layer of diamond-like carbon of between about 50 Å to about 3000 Å (Column 7, lines 10-22) and wherein the attachment layer a capture molecule bound to the diamond-like carbon for specific capture of an analyte by binding the analyte to said capture molecule (Column 10, line 26-

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Column 12, line 33; Column 15, lines 58-64; Fig. 21-23; and Claim 11) but they are silent regarding the hardness of the diamond-like carbon. However, the properties of diamond-like carbon were well known in the art as taught by Choi et al. Specifically, Choi et al teach the hardness of diamond-like carbon is between about 15 to about 50 Gpa (Table 1, Column 3, lines 47-62). Therefore, the diamond-liked carbon of Kobashi has a hardness of between about 15 to about 50 Gpa as claimed.

Regarding Claim 81, Kobashi teaches the support comprises diamond-like carbon (Abstract and Column 15, lines 58-64) but they are silent regarding the refractive index. However, the properties of diamond-like carbon were well known in the art at the time the claimed invention was made as taught by Choi et al. Specifically, Choi et al teach the refractive index of diamond-like carbon is about 1.5 to about 2.2 (Table 1, Column 3, lines 47-62). Therefore, the diamond-liked carbon of Kobashi has a refractive index of about 1.5 to about 2.2 as claimed.

It is noted that the courts have stated that chemical compositions and its properties are inseparable. Therefore, the properties of the claimed diamond-like carbon are necessarily present in the diamond-like carbon of Kobashi.

“Products of identical chemical composition can not have mutually exclusive properties.” A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990) see MPEP § 2112.01.

### ***Double Patenting***

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent

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possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 51-82 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 7, 11, 23-34 and 38-50 of copending Application No. 08/950,963. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to a solid support comprising an attachment layer comprising diamond-like carbon and differ only in the scope of the claims. Specifically, the instant application broadly claims the genus solid support and the '963 claims the species solid support wherein some of the species further comprises an optically functional layer and/or provide for sample flow. However, the open claim language "comprising" recited in the instant claims encompasses the additional components of the '963 species. Additionally, instant claims 55, 57, 71 and 73 recite the '963 species limitations i.e. optically functional layer and/or provide for sample flow. Because the instantly claimed solid support is a genus of the '963 solid support species and because instant claims 55, 57, 71 and 73 recite the species limitations, the instant claims are obvious in view of the '963 solid support. The courts have stated that a genus is obvious in view of the teaching of a species see *Slayter*, 276 F.2d 408, 411, 125 USPQ 345, 347 (CCPA 1960); and *In re Gosteli*, 872 F.2d 1008, 10 USPQ2d 1614 (Fed. Cir. 1989).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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**Conclusion**

14. No claim is allowed.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BJ Forman whose telephone number is (703) 306-5878. The examiner can normally be reached on 6:30 TO 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones can be reached on (703) 308-1152. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4242 for regular communications and (703) 308-8724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.



BJ Forman, Ph.D.  
Patent Examiner  
Art Unit: 1634  
October 17, 2002